JOSEPH RYERSON & SON STEEL COMPANY
CSM Site Summary

JOSEPH RYERSON & SON STEEL COMPANY

Oregon DEQ ECSI #: 2441

9040 N. Burgard Way
DEQ Site Mgr: No PM
Latitude: 45.6119°
Longitude: -122.7669°
Township/Range/Section: 2N/1W/35

River Mile: 4.1 East bank

LWG Member ☐ Yes ☒ No

Upland Analytical Data Status: ☐ Electronic Data Available ☒ Hardcopies only

1. SUMMARY OF POTENTIAL CONTAMINANT TRANSPORT PATHWAYS TO THE RIVER

The current understanding of the transport mechanism of contaminants from the uplands portions of the Joseph Ryerson & Son (Ryerson) site to the river is summarized in this section and Table 1, and supported in following sections.

1.1. Overland Transport

The Ryerson property is located approximately 800 feet from the Willamette River. Information on overland transport at this site was not available in DEQ files. However, the potential for stormwater sheet runoff to reach the river is very low given the distance to the river.

1.2. Riverbank Erosion

Not applicable.

1.3. Groundwater

Limited information is available for the Ryerson property. Contamination at Ryerson property has not been documented (DEQ 2004); no investigations have occurred at this site.

1.4. Direct Discharge (Overwater Activities and Stormwater/Wastewater Systems)

There are no overwater activities associated with this site, as it is located approximately 800 feet east of the head of the International Terminals Slip.

Stormwater runoff at one time was routed to a ditch that drained directly to the head of the International Terminals Slip. Stormwater continued to drain to the slip after the Ryerson site was developed in 1990.

Currently, stormwater from the Ryerson site is reported to discharge through Outfall 18 (WR-123) at the head of the slip, but this has not been confirmed.

1.5. Relationship of Upland Sources to River Sediments

See Final CSM Update.

1.6. Sediment Transport

Not applicable, as the site is located 800 feet from the Willamette River.

2. CSM SITE SUMMARY REVISIONS

Date of Last Revision: May 31, 2005

3. PROJECT STATUS

A preliminary assessment was recommended by DEQ in 1999. No investigations of the site have been conducted.

Activity		Date(s)/Comments
PA/XPA	☐	
RI	☐	
FS	☐	
Interim Action/Source Control	☐	
ROD	☐	
RD/RA	☐	
NFA	☐	

DEQ Portland Harbor Site Ranking (Tier 1, 2, 3, or Not ranked): Not ranked

4. SITE OWNER HISTORY

Primary Source: Bridgewater 2000b, DEQ 2004

Owner/Occupant	Type of Operation	Years
Joseph Ryerson & Sons	Steel product manufacturing and distribution	1990 - present
?	Log storage	mid-1960s - 1980
?	Vacant	1945 – mid-1960s
OSC Shipyard	Gravel parking lot	1941 - 1945

5. PROPERTY DESCRIPTION

The Ryerson property is located in an area of mixed industrial, commercial, and residential use on the east side of the Willamette River at approximately RM 4.1. The 25.2-acre site is about 800 feet east from the head of the International Terminals Slip. The Burgard Industrial Park borders the Ryerson property on three sides. There is a large steel warehouse on this otherwise flat, paved site. West of the warehouse is a large crane rail. Fabricated steel frames are stored on the pavement. According to a Level 1 environmental site assessment done for the southeast Burgard Park property by EMS in 1997, there are three USTs on the Ryerson property (EMS 1997). Information about the location and contents of the USTs was not available in DEQ files.

6. CURRENT SITE USE

Very little information on this site exists in DEQ files. The property is used for the manufacture and distribution of structural steel products. DEQ's Strategy Recommendation for the nearby Schnitzer Burgard property describes the Ryerson site as a "steel roofing manufacturing facility and steel warehouse."

7. SITE USE HISTORY

This area was used as a gravel parking lot for the OSC shipyard in the 1940s and remained vacant until the mid-1960s when the site was used for log storage. The log operations continued until approximately 1980, at which time the area was filled with dredged sand. Joseph Ryerson & Sons purchased the property in 1990 (Bridgewater 2000b).

According to Bridgewater (2000a,b), aerial photos in late 1970s show a ditch draining stormwater runoff from the western part of the site to the head of the slip. This drainage continued after the site was developed for the Ryerson building.

8. CURRENT AND HISTORIC SOURCES AND COPCS

The understanding of historic and current potential upland and overwater sources at the site is summarized in Table 1. The following sections provide a brief overview of the potential sources and COPCs at the site requiring additional discussion.

8.1. Uplands

DEQ requested information regarding past and current environmental conditions from Ryerson in March 1999. Ryerson did not respond to DEQ's request, and DEQ has not taken further action. Based on the limited information available, potential current and historic sources are limited to three USTs located onsite, the contents and locations of which are unknown.

Stormwater runoff at one time was routed to a ditch that drained directly to the head of the International Terminals Slip. Stormwater continued to drain to the slip after the Ryerson site was developed. Currently, stormwater from the Ryerson site presumably discharges through Outfall 18 (SR-123) at the head of the slip, but this has not been confirmed (Bridgewater 2000a,b).

8.2. Overwater Activities

☐ Yes ☒ No

The Ryerson property is not located adjacent to the Willamette River.

8.3. Spills

No known or documented spills were located either from DEQ's Emergency Response Information System (ERIS) database for the period of 1995 to 2004, from oil and chemical spills recorded from 1982 to 2003 by the U.S. Coast Guard and the National Response Center's centralized federal database [see Appendix E of the Portland Harbor Work Plan (Integral et al. 2004)], from facility-specific technical reports, or from DEQ correspondence.

9. PHYSICAL SITE SETTING

Joseph Ryerson & Son is located approximately 3,000 feet from the Willamette River and 800 feet from the International Terminals Slip.

9.1. Geology

The Ryerson property consisted of low-lying marshlands until 1941, after which fill was added and the property was used as a parking lot and/or storage until 1980. Additional dredge fill was added to the site in 1980, and buildings were constructed on the property (Bridgewater 2000b). Available files indicate that no geologic data have been collected at the site. Based on information from adjacent sites (Schnitzer Burgard Industrial Park and Northwest Pipe), the dredge fill consists of a mixture of brown sand and silty sand, and is likely 15 feet or less in thickness (Bridgewater 2001). Based on the lithologic log from an industrial production well at the nearby Northwest Property Company (near the center of the Schnitzer Burgard Industrial

Park), underlying the dredge fill to an approximate depth of 160 feet bgs are Quaternary deposits consisting of interbedded sands and silty clay. Below 160 to 220 feet bgs, the Quaternary deposits are predominantly composed of sand with gravel lenses (CH2M Hill 2000). The coarser-grained material may represent Pleistocene flood gravels (Quaternary deposit) and/or possibly the Troutdale Formation. Between 220 and 258 feet bgs, silty clay and clay with minor lenses of gravel were noted (CH2M Hill 2000). The latter unit may represent the Sandy River Mudstone. The total depth explored during installation of the onsite industrial production well was 258 feet bgs. The Oregon Water Resources Department well identification number for the well on the nearby Northwest Property Company site is MULT 1824.

9.2. Hydrogeology

Available information indicates that no hydrogeologic data have been collected at the site. Based on information from adjacent sites (Schnitzer Burgard Industrial Park and Northwest Pipe), localized zones of perched groundwater may be present within the dredge fill. Such perched zones have been encountered at a depth of about 15 to 20 feet on nearby properties. The presence and extent of the perched zones are expected to be variable and related to the presence of silt content within the dredge fill. The groundwater flow gradients in the perched zones are anticipated to be variable and relatively low; and discharge from the perched groundwater zones either discharges toward the river or infiltrates downward into the underlying dredge fill and alluvial deposits (Bridgewater 2001). A more continuous unconfined groundwater zone is anticipated within alluvial deposits underlying the dredge fill (Bridgewater 2001) and potentially including the lower portions of the dredge fill itself. Based on information from adjacent sites, the groundwater flow direction in the alluvial groundwater zone is generally to the west, toward the Willamette River, with local variations in groundwater flow expected. The alluvial groundwater zone is anticipated to discharge to the river (Bridgewater 2001).

10. NATURE AND EXTENT (*Current Understanding*)

The current understanding of the nature and extent of contamination for the uplands portions of the site is summarized in this section. When no data exist for a specific medium, a notation is made.

10.1. Soil

10.1.1. Upland Soil Investigations

☐ Yes ☒ No

No soil investigations have been performed on this site.

10.1.2. Riverbank Samples

☐ Yes ☒ No

The site is not adjacent to the river.

10.1.3. Summary

No documentation of soil investigations on the Ryerson property was found during research for this site.

10.2. Groundwater

Available information indicates that no groundwater data have been collected at the site.

10.2.1. Groundwater Investigations

☐ Yes ☒ No

No groundwater investigations have been conducted at the site.

DEQ (2004) has recommended that a preliminary assessment of Joseph Ryerson & Son be completed; however, no documented site investigations have been conducted at the site.

10.2.2. NAPL (Historic & Current) ☐ Yes ☒ No

No groundwater investigations have been conducted at the site.

10.2.3. Dissolved Contaminant Plumes ☐ Yes ☒ No

No groundwater investigations have been conducted at the site.

Plume Characterization Status ☐ Complete ☐ Incomplete

Not applicable (N/A). No geologic or hydrogeologic data have been collected at the site.

Plume Extent

N/A. No geologic or hydrogeologic data have been collected at the site.

Min/Max Detections (Current situation)

N/A. No geologic or hydrogeologic data have been collected at the site.

Current Plume Data

N/A. No geologic or hydrogeologic data have been collected at the site.

Preferential Pathways

N/A. No geologic or hydrogeologic data have been collected at the site.

Downgradient Plume Monitoring Points (min/max detections)

N/A. No geologic or hydrogeologic data have been collected at the site.

Visual Seep Sample Data ☐ Yes ☒ No

This site is not adjacent to the river, so seeps along the river cannot be directly related to the Ryerson site.

Nearshore Porewater Data

N/A. No geologic or hydrogeologic data have been collected at the site.

Groundwater Plume Temporal Trend

No geologic or hydrogeologic data have been collected at the site.

10.2.4. Summary

There is no documented contamination at the Joseph Ryerson & Son site (DEQ 2004). DEQ has recommended that a preliminary assessment of Joseph Ryerson & Son be completed (DEQ 2004); however, no documented site investigations have been conducted at the site.

10.3. Surface Water

10.3.1. Surface Water Investigation ☐ Yes ☒ No

10.3.2. General or Individual Stormwater Permit [Current or Past] ☐ Yes ☒ No

Do other non-stormwater wastes discharge to the system? ☐ Yes ☒ No

10.3.3. Stormwater Data ☐ Yes ☒ No

10.3.4. Catch Basin Solids Data ☐ Yes ☒ No

10.3.5. Wastewater Permit ☐ Yes ☒ No

10.3.6. Wastewater Data ☐ Yes ☒ No

10.3.7. Summary

No surface water investigations have been performed on the Ryerson site. According to site drawings of the Burgard Industrial Park stormwater system, Ryerson is located in a drainage basin that discharges through Outfall 18 (WR-123) at the head of the slip. Numerous other land uses and adjacent properties also discharge through this outfall.

10.4. Sediment

10.4.1. River Sediment Data ☐ Yes ☒ No

10.4.2. Summary

There are no site-specific sediment data for the Ryerson Steel property as it is located approximately 800 feet east of the head of the International Terminals Slip and 3,000 feet east of the main stem of the Willamette River.

11. CLEANUP HISTORY AND SOURCE CONTROL MEASURES

11.1. Soil Cleanup/Source Control

No information on soil cleanup or source control was found in DEQ files.

11.2. Groundwater Cleanup/Source Control

There is no history of groundwater cleanup or groundwater source control at Joseph Ryerson & Son.

11.3. Other

No additional information regarding cleanup history or source control measures was found for the Ryerson site.

11.4. Potential for Recontamination from Upland Sources

See Final CSM Update.

12. BIBLIOGRAPHY / INFORMATION SOURCES

References cited:

Bridgewater. 2000a. Current Site Conditions Assessment, Burgard Industrial Park, 12005 North Burgard Road, Portland, Oregon. Prepared for Schnitzer Investment Corporation, Portland, OR. Bridgewater Group, Inc., Portland, OR.

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CH2M HILL. 2000. Preliminary Assessment for Northwest Pipe Company, Portland, Oregon. Prepared

for Northwest Pipe Company, Portland, OR. CH2M HILL, Portland, OR.

DEQ. 2004. DEQ Site Summary Report – Details for Site ID 2441. DEQ Environmental Cleanup Site (ECSI) Database. Accessed January 29, 2004. www.deq.state.or.us/wmc/ecsi/ecsidetail.asp?seqnbr=2441.

EMS. 1997. Level I Environmental Site Assessment of Real Property in Parcel 2 of the Burgard Industrial Park in Portland, Oregon. Environmental Management Solutions, Portland, OR.

Integral, Windward, Kennedy/Jenks, Anchor Environmental, and Groundwater Solutions. 2004. Portland Harbor RI/FS Programmatic Work Plan. Prepared for the Lower Willamette Group, Portland, OR. Integral Consulting, Inc., Mercer Island, WA.

Other relevant references/information sources:

Figures:

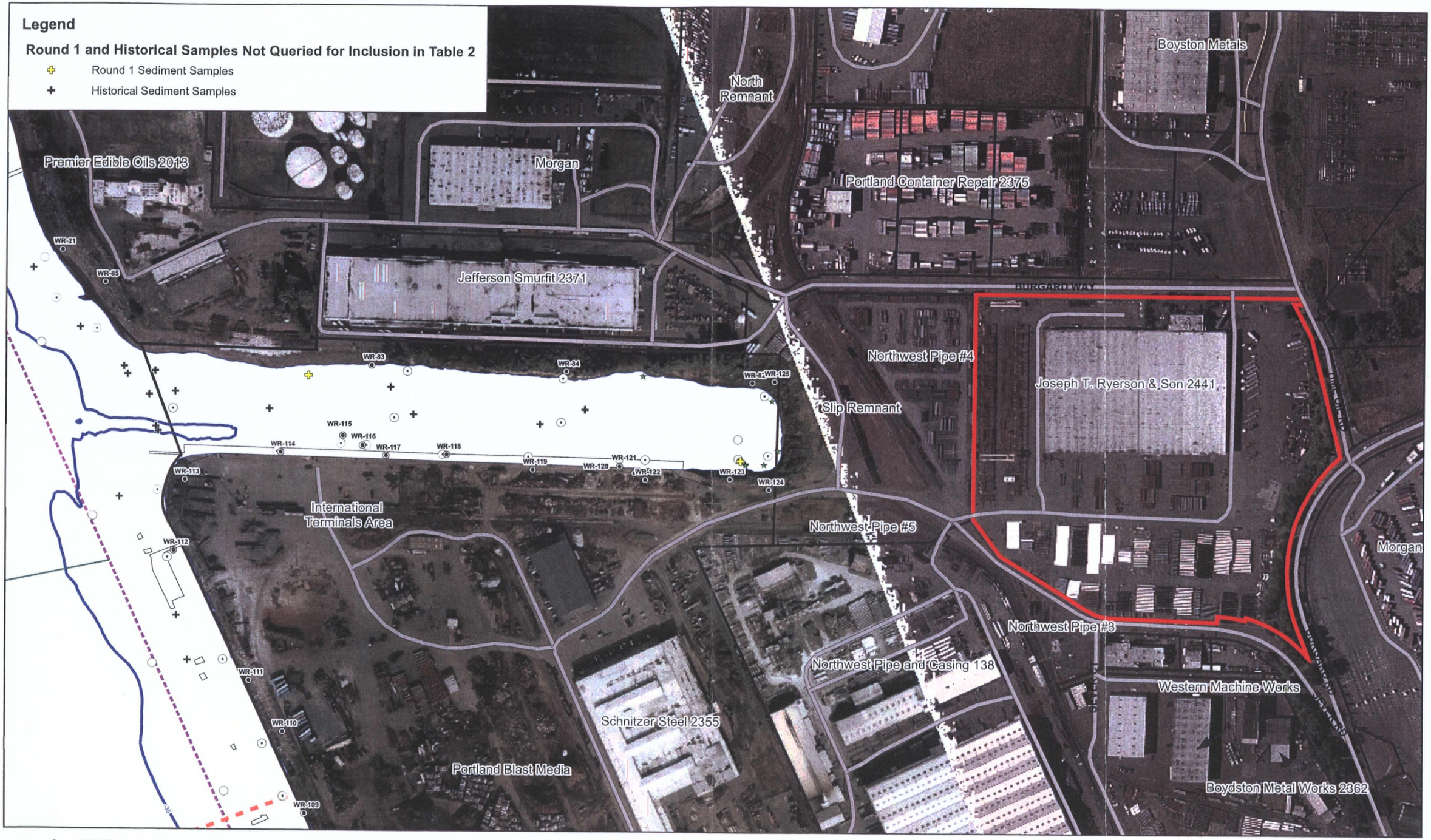
Figure 1. Site Features

Tables:

Table 1. Potential Sources and Transport Pathways Assessment

FIGURES

Figure 1. Site Features



integral consulting inc.

LWG Lower Willamette Group

Map Document: (C:\GIS\Projects\Portland_Harbor\LWG-Map-Projects\Conseptual_Site_Model\Sample_Locations_3rd_Group.mxd)
Plot Date: 05/26/2005

Areal Photo Date: October 2001.
Base Map features from Portland Metro's RLIS.

Outfall information contained on this map is accurate according to available records; however, the City of Portland makes no warranty, expressed or implied, as to the completeness or accuracy of the information published (updated March 2005).

Legend

- Outfalls
- Seep Photo Location (Not location of actual Seep)
- Selected ECSI Site Property Boundary
- Navigation Channel
- Docks & In-water Structures
- River Miles
- -35ft. Contour (NAVD 88)

Human Use Areas

- Dockside Worker
- Recreational Beach Use
- Transient

LWG Round 2 Proposed Sediment Samples

- Surface Sample Only
- Core & Surface Sample

0 50 100 200 Feet

DRAFT

DO NOT QUOTE OR CITE. This document is currently under review by US EPA and its federal, state, and tribal partners, and is subject to change in whole or in part.

Figure 1-Site Features
Portland Harbor RI/FS
Conceptual Site Model
Joseph T. Ryerson & Son
ECSI 2441

TABLES

Table 1. Potential Sources and Transport Pathways Assessment

Joseph T. Ryerson & Son #2441

Table 1. Potential Sources and Transport Pathways Assessment

Potential Sources	Media Impacted					COIs																Potential Complete Pathway				
						TPH			VOCs																	
Description of Potential Source	Surface Soil	Subsurface Soil	Groundwater	Catch Basin Solids	River Sediment	Gasoline-Range	Diesel - Range	Heavier - Range	Petroleum-Related (e.g. BTEX)	VOCs	Chlorinated VOCs	SVOCs	PAHs	Phthalates	Phenolics	Metals	PCBs	Herbicides and Pesticides	Dioxins/Furans	Butyltins	Overland Transport	Groundwater	Direct Discharge - Overwater	Direct Discharge - Storm/Wastewater	Riverbank Erosion
Upland Areas																										
Historic stormwater trench to slip	?	?			✓	?	?	?					?			?								✓	
USTs	?	?				?	?																			
Overwater Areas																										
Other Areas/Other Issues																										

Notes:

All information provided in this table is referenced in the site summaries. If information is not available or inconclusive, a ? may be used, as appropriate. No new information is provided in this table.

✓ = Source, COI are present or current or historic pathway is determined to be complete or potentially complete.

? = There is not enough information to determine if source or COI is present or if pathway is complete.

Blank = Source, COI and historic and current pathways have been investigated and shown to be not present or incomplete.

UST Underground storage tank
AST Above-ground storage tank
TPH Total petroleum hydrocarbons
VOCs Volatile organic compounds.
SVOCs Semivolatile organic compounds
PAHs Polycyclic aromatic hydrocarbons
BTEX Benzene, toluene, ethylbenzene, and xylenes
PCBs Polychlorinated biphenols